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REMARKS

Claims 1-26 are pending in the application. Claims 1-4 and 6-26 stand rejected to by the Examiner. Claim 5 is objected to. The drawings are accepted. The Examiner's objections and rejections are addressed below in substantially the same order as in the office action.

REJECTIONS UNDER 35 USC § 103

Claims 1-4, 6-26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Fredd '599 in view of Scarsdale. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). MPEP 2143.

In this instance, the prior art clearly does not have a suggestion or motivation to combine. Section 2143.01 of the MPEP defines two cases that preclude a finding of a suggestion to combine: (i) a modification that renders a device unsatisfactory for its intended purpose, and (ii) a modification that would change the principle of operation. For the reasons presented below, the Examiner's proposed modification falls within these two cases.

1. *MPEP 2143.01 (v) If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)*

In the device described by Fredd, the bore of the tubing string 97 performs at least three specific functions. First, during installation and operation, the tubing string 97 bore conveys and houses the measuring instrument 81. Figure 2 very clearly shows the measuring instrument 81 residing within the bore of the tubing string 97. Second, the bore of the tubing string 97 conveys pressurized fluid to the downhole tool during pressure measurements. Thus, the bore of the tubing string 97 must remain free in order to pump down the fluid needed operate the downhole valve. Third, the bore of the tubing string 97 acts as a pressure chamber so that the measuring instrument 81 can make pressure readings. The seals 104 and 105 are positioned in the bore for precisely that purpose to seal off the bore.

In the operation of the FIG. 2 form of the invention, the packer 52 will be run and set. If the foot valve 55 is in open position the packer may be run with the plug 57 in place. After the packer is set the tubing string having the subsurface safety valve and traveling joint thereon are run into the well and landed in the packer and may be latched thereto by any suitable means, such as indicated at 103.

When the subsurface safety valve is landed it will be in the open position due to the weight of the weight string of tubing 97. After the tubing is run, the sensing instrument 81 will be run in and landed, as shown in FIG. 2. Thereafter, the well may be opened at the surface to permit flow through the annulus to obtain flowing well data. When it is desired to obtain shut in data, the tubing is pressured to the extent necessary to drive piston 74 upwardly against the force exerted by the string 97 moving the valve member 71 to the closed position. At this time well fluids flowing up through bore 68, 88 and 89 and through the passage 82 will find its way past the check valve 85 and through port 87 into the measuring instrument. This fluid is trapped by the seals 104 and 105 on the sensing instrument 81. (Col 7, lines 5-28, emphasis added)

In contrast to the Fredd device, the sole function of the tubing strings in the

Scarsdale device is to produce fluid from the two zones. The Scarsdale device necessarily has to have the bores of the tubing strings free and open in order to pump fluid from the formations.

To operate dual electric submersible pumping system 10, second ESP system 14 and packer 36 are initially deployed within wellbore 24. Subsequently, first ESP system 12 is deployed above second ESP system 14. As a first zone fluid flows through perforations 28 into wellbore 24, the fluid is drawn into intake 50 and pumped upwardly through first deployment tubing 16. Simultaneously, a second zone fluid flows through perforations 32 into wellbore 24 and is drawn into intake 62 and pumped upwardly through second deployment tubing 18. Packer 36 separates first zone 30 and the first zone fluid from second zone 34 and the second zone fluid within wellbore 24 to prevent commingling of fluids. (Col 4, lines 31-43, emphasis added)

For convenience, a side-by-side comparison of the two devices is provided on the following page. The functions of the tubing and tubing bores of Scarsdale and Fredd are mutually exclusive. In particular, because the Scarsdale pumps flow fluid up the tubular, the Fredd device cannot function as intended because neither the measuring device nor the hydraulic actuation features of Fredd can be operated. Indeed, the only reason that Fredd device can operate is that production fluid flows up the annulus, not the tubular. Vice versa, the Fredd device cannot be positioned in the Scarsdale arrangement because the measurement device and valve would block the bores of the production tubular and prevent formation fluid flow to the surface.

Therefore, the proposed combination of Fredd and Scarsdale is improper because the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose. MPEP 2143.01 (v).

2. ***MPEP 2143.01 VI. If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)***

As described above, the Fredd Device is expressly configured for wells with annular flow. In contrast, the Scarsdale Device is expressly configured for flow using production tubulars. The principle of operation of the Fredd Device utilizes (i) annular flow and (ii) actuation of a downhole valve via a tubular. On this point, Fredd is crystal clear:

Another object is to provide a method and apparatus as in the preceding object in which the safety valve may be designed to close ***in response to pressure conditions in the casing-tubing annulus*** or may be designed to be closed in response to changes in a control pressure which pressure is in turn controlled at the surface by conditions sensed at the surface in the conventional manner.

Another object is to provide a method and apparatus located adjacent the ***flowing formation for controlling flow through the casing-tubing annulus in which the valve is controlled by pressure within the tubing*** exerting a pressure in one direction and an urging means, such as a weight string of tubing, exerting a pressure in the other direction.

Another object is to provide a method and apparatus for controlling ***flow*** adjacent a well formation in which ***flow through the casing-tubing annulus is controlled by tubing pressure*** exerting an upward force on an actuator opposed by a weight string of tubing urging the actuator downwardly.

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Another object of this invention is to provide an ***annulus flow control system and method*** in which the effect of tubing pressure on a valve operator is opposed by an urging means which may be readily varied in

power to meet well conditions.

Another object is to provide an *annulus flow control system and method* in which the effect of tubing pressure on a valve operator is opposed by a weight string of tubing which may include as many lengths of tubing as desired to meet well conditions.

Another object is to provide a subsurface safety valve for *controlling annulus flow* which may also be utilized in conjunction with a measuring instrument to obtain well data while controlling the flow at a point adjacent the producing formation.

Another object is to provide an *annulus flow control system and method* in which the *flow control valve is controlled at least in part by tubing pressure* and means are provided for purging the tubing to reduce the liquid level within the tubing.

Another object is to provide an *annulus flow control system and method in which the effect of tubing pressure* on a valve operator is opposed by a weight string of tubing in which the pressure responsive means exposed to tubing pressure may be readily and easily compounded and the weight string of tubing may include as many stands of tubing as desired to accommodate well conditions.

Another object is to provide an *annulus flow control system and method* in which a subsurface safety valve is provided in conjunction with a well packer *for controlling flow through the annulus* and in which the control valve is a foot valve which remains in the well and is automatically closed when the tubing string is pulled.

Another object is to provide a system and method as in the preceding objects in which the operator for the safety valve is urged downwardly by a weight string of tubing and upwardly by tubing pressure.

Another object is to provide a system and method as in the preceding objects in which gas lift valves may be provided in the tubing above the safety valve and the lifting gas aids *the flow of oil up the annulus* and act as the control fluid. (Columns 1 – 2, emphasis added).

The Scarsdale Device, on the other hand, operates under the principle of flow via production tubulars. Moreover, as shown in Figure 2 the production tubulars are fixed and used exclusively for production flow. Therefore, modifying Fredd with Scarsdale necessarily and improperly changes the principle of operation of the prior art invention being modified. MPEP 2143.01 (vi).

For these above reasons, the Examiner's rejection of independent claims 1, 8, 15 and 21 is not proper and Applicant requests that the rejections be withdrawn. Further, because the independent claims are allowable, Applicant submits that all claims depending therefrom are also in condition for allowance and such action is requested.

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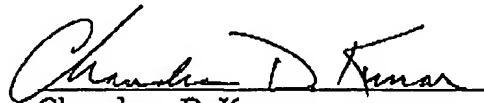
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**CONCLUSION**

For all the foregoing reasons, Applicant submits that the application is in a condition for allowance and such action is requested. No fee is believed due for this paper. The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 02-0429 (284-37042-US).

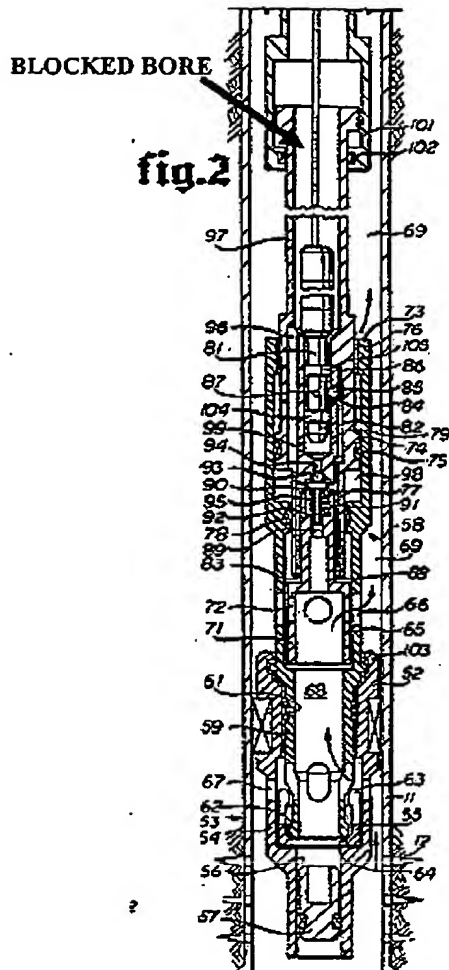
Respectfully submitted,

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**FREDD 599****SCARSDALE 143****FIG. 1**